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SUGHRUE MION, PLLC				
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EXAMINER				
SHERALI, ISHRA TI				
ART UNIT		PAPER NUMBER		
2624				
NOTIFICATION DATE		DELIVERY MODE		
02/04/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/582,542

Applicant(s)

TSUKADA, MASATO

Examiner

Sherali Ishrat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-10 and 15-24 is/are rejected.
- 7) ☒ Claim(s) 4-7 and 11-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88/2)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date 10/24/2008; 11/21/2007; 6/9/2006

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 17-24 are rejected under 35 USC 101 as being non- statutory because claim 17 recite "A computer program causing a computer to execute a projector color correction method". Claiming a computer program causing a computer to execute is non-statutory. Examiner recommends that claim 17 should recite "A computer readable storage medium storing a computer program causing a computer to execute a projector color correction method. Applicant is reminded that any amended language should have support in the specification. Dependent claims 18-24 also recite "a computer program", claims 18-24 should also be amended to overcome rejection under 35 USC 101.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-3, 8-10, and 15-19 and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Wada (US 2003/0007098) in view of Ohsawa (EP 1 058 158 A2).

Regarding claim 1, 9, and 17 Wada discloses projector color correction (Wada Fig. 4, blocks 100 and 120, page 5, paragraph 0120, lines 1-4) comprising:

generating a color conversion of an image projected onto a projection plane based on a previously first color information and a second color information on the image projected onto the projected plane (Wada Fig. 4, blocks 100 and 120, page 5, paragraph 0128, states "The colored light information processing section 140 converts a white color reflecting the actual visual environment information into coordinate values in the Lab space and determines coordinate values that form a complementary color pair for the converted coordinate values, based on coordinate values in the white Lab space in a predetermined reference environment as well as the converted coordinate values. The complementary color pair means a pair of colors which creates a gray color when these colors are mixed together". This corresponds to generating a color conversion of an image projected onto a projection plane based on a previously first color information and a second color information on the image projected onto the projected plane);

correcting an input image for colors using the color conversion (Wada Fig. 4, blocks 100 and 120, page 5, paragraph 0120, lines 1-4).

Wada has not explicitly disclosed color correction based on the pixel by pixel or block by block basis.

In the same field of endeavor Ohsawa (EP 1 058 158 A2) discloses color correction based on the pixel by pixel or block by block basis (Ohsawa Fig 9, paragraphs 0073-0082, especially paragraph 0076, states bias correction is performed using bias data measured in units of pixels, thereby coping with a case wherein change in units of pixels". This corresponds to color correction based on the pixel by pixel)

Therefore it would have been obvious at the time the invention was made to use the teaching/disclosure of Ohsawa in the system of Wada of color correction on pixel by pixel basis.

Regarding claims 2, 10 18 Wada disclose receiving input through user interface and generating the color conversion based on the input (Wada, Fig 4, paragraphs 0120-0121 projector inputs RGB from PC and perform color conversion).

Regarding claim 3, 19 Wada discloses acquiring the second color information of the image on the projection plane and calculating color conversion based on the first color and second (Wada Fig. 4, blocks 100 and 120, page 5, paragraph 0128, states "The colored light information processing section 140 converts a white color reflecting the actual visual environment information into coordinate values in the Lab space and determines coordinate values that form a complementary color pair for the converted coordinate values, based on coordinate values in the white Lab space in a predetermined reference

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environment as well as the converted coordinate values. The complementary color pair means a pair of colors which creates a gray color when these colors are mixed together". This corresponds to generating a color conversion of an image projected onto a projection plane based on a previously first color information and a second color information on the image projected onto the projected plane).

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Therefore it would have been obvious at the time the invention was made to use the teaching/disclosure of Ohsawa in the system of Wada of color correction on pixel by pixel basis.

Regarding claims 8,15 and 24, Wada discloses color conversion based on equation or look table (Wada , paragraphs 0172-0176) and

Ohsawa disclose color conversion based on equation or look table (Ohsawa paragraphs 0076-0079).

Regarding claim 16, Wada disclose the projector color correcting apparatus and generating image data for colors based on the image data applied

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and a projection main body for projecting the image data corrected (Figs 1 and 4 paragraphs 0120-0128).

Allowable Subject Matter

5. Claims 4-7 and 11-14 are objected as being dependent on rejected base claim but would be allowable over prior art of record if rewritten in independent form including limitations of the base claim and intervening claims. Similarly claims 20-23 are also objected as being dependent on rejected base claim but would be allowable over prior art of record if rewritten in independent form including limitations of the base claim and intervening claims and also provided that claims 20-23 overcome rejection under 35 USC 101.

Communication

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherali Ishrat whose telephone number is 571-272-7398. The examiner can normally be reached on 8:00 AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see

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<http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sherali Ishrat/

Primary Examiner, Art Unit 2624

January 30, 2010